REMARKS

Reconsideration and allowance of the subject application are respectfully requested. Upon entry of this Amendment, claims 1 and 3-24 are pending in the application. In response to the Office Action (Paper No. 9), Applicant respectfully submits that the pending claims define patentable subject matter.

Claims 1-8, 11-17 and 20-24 are rejected under 35 U.S.C. § 102(a) as being anticipated by Applicant's Admitted Prior Art. Claims 1-8, 11-17 and 20-24 are rejected under 35 U.S.C. § 103(a) 1-9, 11-18 and 20-24 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Koyama (USP 5,088,029) in view of Applicant's Admitted Prior Art. Claims 10 and 19 are objected to as being dependent upon a rejected base claim but would be allowable if rewritten in independent form.

With regard to the § 102 rejection based on Applicant's Admitted Prior Art, the Examiner asserts that Applicant's Admitted Prior Art (page 3, lines 13-21) discloses all of the features of independent claims 1, 11 and 20. With regard to the § 103 rejection based on Koyama and Applicant's Admitted Prior Art, the Examiner asserts that Koyama discloses all of the features of independent claims 1, 11 and 20 except for the devices being connected by a digital interface (IEEE 1394 format) and the predetermined data transmission format is an IEC 61883 format, for which the Examiner cites Applicant's Admitted Prior Art. Applicant respectfully submits that the amended claims would not have been anticipated by or rendered obvious in view of the cited references.

Amended independent claim 1 is directed to a "method of managing a connection between plurality of devices in a network system, wherein a first device for transmitting data using a predetermined data transmission format and a second device for receiving the data are connected by a predetermined digital interface through a connection established by a control device." Claim 1 requires:

> (a) transmitting a connection management command from a control device to at least one of the first device and the second device, wherein connection management command specifies at least one connection status parameter of an output plug control register of the first device or an input plug control register of the second device for which the control device desires to be notified of a change; and
>
> (b) transmitting from the at least one of the first and second devices a response to the connection management command informing the control device of a change in the connection status parameter which occurs in the at least one of the first and second devices, wherein the control device is one of the first device, the second device and a third device.

Amended independent claim 11 is directed to a connection management method comprising the steps of:

> (a) establishing a connection between a first device for transmitting information using a predetermined data transmission format and a second device for receiving the information, wherein said first and second devices are connected by a predetermined digital interface;
>
> (b) transmitting a connection management command for controlling a connection management status to at least one of the first and second devices, wherein the connection management command specifies at least one connection status parameter of an output

plug control register of the first device or an input plug control register of the second device; and

(c) controlling the connection between the first and second devices when a response to the connection management command indicating a change in the connection status parameter is received.

Applicant's Admitted Prior Art (page 3 of the present application) indicates that:

> when either device does not desire to receive or transmit data any longer, an algorithm for informing a control device or the connected other device of this fact has been presented by defining a new control command in an audio-video/control command transaction set (AV/C CTS). Specifically, when any change occurs in a device for transmitting or receiving real time data, a new control command is defined in AV/C CTS to indicate this change. According to the AV/C CTS, information is available regarding whether each input plug desires to receive any input information, and whether each output plug desires to output information. Further, this is the case if a signal output from an output plug is transformed.

However, the "new control command" of the prior art algorithm of Applicant's Admitted Prior Art simply notifies the control device that one of the connected devices does not desire to receive or transmit data any longer and does not transmit a notify response from the sink or source device to the control device when a change occurs in the bit field of the iPCR or the oPCR. That is, as indicated at page 3, lines 22-25, the new command of the AV/C CTS utilized by the prior art algorithm does not provide information regarding changes in other factors for controlling data flow, such as the bandwidth and information as to how many devices are connected to a particular connection. On the other hand, the present invention enables the control device to be informed of changes in any of the bit fields of the iPCR or oPCR which are designated in the connection management command.

Accordingly, Applicant respectfully submits that Applicant's Admitted Prior Art does not teach or suggest that the connection management command specifies at least one connection status parameter of an output plug control register of the first device or an input plug control register of the second device, as required by claims 1 and 11

Koyama discloses a system for restructuring an input/output control system having first and second input/output controllers each of which respectively connects a first or a second group of peripheral devices in a lower level and a data processing apparatus in an upper level, and controls data transfer operation between each of the corresponding group of peripheral devices and the data processing apparatus. Each of the first and second group of peripheral devices is also connected to the input/output controller corresponding to the other group of peripheral devices so as to realize a cross call function. Each of the first and second plurality of input/output controllers respectively holds its own control data, which is used for controlling a data transfer operation between the corresponding peripheral devices and the data processing apparatus. When a situation which requires its own input/output controller to be in an off-line state arises, that fact is notified to the other input/output controller and the control data held in its own input/output controller is transferred to the other input/output controller. The other input/output controller receives the transferred control data and restructures the control data so that the other input/output controller can control the data transfer operation between the data processing apparatus and all the peripheral devices which were originally under the control of the other input/output controller as well as all the devices originally under the control of the above input/output controller wherein the above situation has arisen.

However, Applicant respectfully submits that it is quite clear that Koyama does not teach or suggest that the connection management command specifies at least one connection status parameter of an output plug control register of the first device or an input plug control register of the second device, as required by claims 1 and 11.

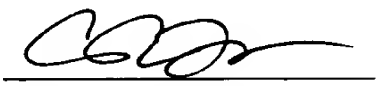
Lastly, with regard to independent claim 20, Applicant respectfully submits that it is quite clear that neither Applicant's Admitted Prior Art nor Koyama discloses a command structure, for indicating a connection status change, which comprises connection register information which represents an output plug control register within the first device for transmitting information or an input plug control register within the second device for receiving information; and identification information indicating an input or output plug at which a connection is established, as claimed.

In view of the above, Applicant respectfully submits that independent claims 1, 11 and 20, as well as dependent claims 3-10, 12-19 and 21-24, should be allowable because the cited references, alone or in combination, do not teach or suggest all of the features of the claims.

Reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: August 23, 2004

Attorney Docket No.: Q60211